

RECEIVED

JAN 1 5 2003

Clone C35

TECH CENTER 1600/2900

DNA Coding Sequence

 gcc
 gcg
 ATG
 AGC
 GGG
 GAG
 CCG
 GGG
 CAG
 ACG
 TCC
 GTA

 GCG
 CCC
 CCT
 CCC
 GAG
 GAG
 GTC
 GAG
 CCG
 AGT

 GGG
 GTC
 CCC
 ATC
 GTG
 GAG
 TAC
 TGT
 GAA
 CCC

 TGC
 GGC
 TTC
 GAG
 GCG
 ACC
 TAC
 CTG
 GAG
 CTG
 GCC

 AGT
 GCT
 GTG
 AAG
 GAG
 CAG
 TAT
 CCG
 GCC
 ATT
 GAG
 ACA
 GGT
 GCC
 TTT

 GAG
 ATA
 GAG
 AAT
 GGG
 GGC
 ACA
 GTG
 GTC
 TTT
 TCC

 AAG
 CTG
 GAG
 AAT
 GGG
 GGC
 TTT
 CCC
 TAT
 GAG
 AAA

 GAT
 CTC
 ATT
 GAG
 AGC
 AGC
 AGC
 AGT
 AAT

 GAG
 GAA
 ACC
 CTA
 GAA
 AAG
 ACC
 AAC
 AGC
 A

FIG.1A

CCT CCC TGC GTC ATC CTG TGA

Protein Sequence

MSGEPGQTSVAPPPEEVEPGSGVRIVVEYCEPCGFEATYLEL ASAVKEQYPGIEIESRLGGTGAFEIEINGQLVFSKLENGGFPY EKDLIEAIRRASNGETLEKITNSRPPCVIL*

FIG.1B



0.8 kb ·

GAPDH

C35 is Expressed at High Levels in Breast Tumors but Not Normal Tissues

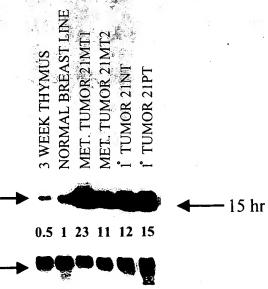


FIG.2A

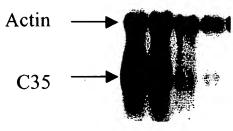
C35 isExpressed at High Levels inBreast Tumors but Not Normal Tissues

BRAIN
HEART
SKELETAL MUSCLE
COLON
ADULT THYMUS
SPLEEN
KIDNEY
LIVER
SMALL INTESTINE
PLACENTA
LUNG



FIG.2B

C35 isExpressed at High Levels in Breast Tumors but Not Normal Tissues T1 T2 T3 N



163 C

45 25 3 1

FIG.2C

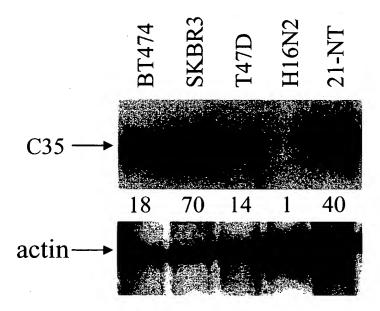
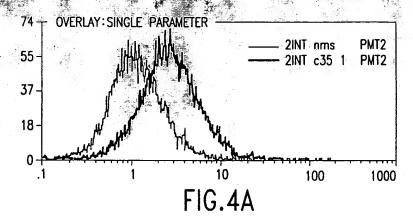
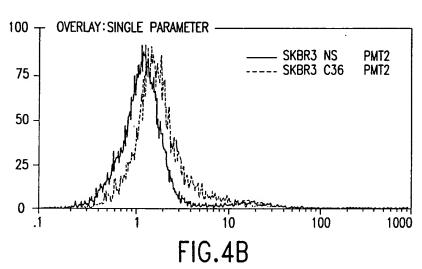
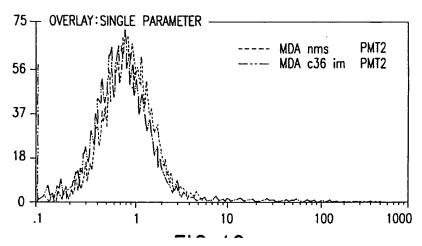


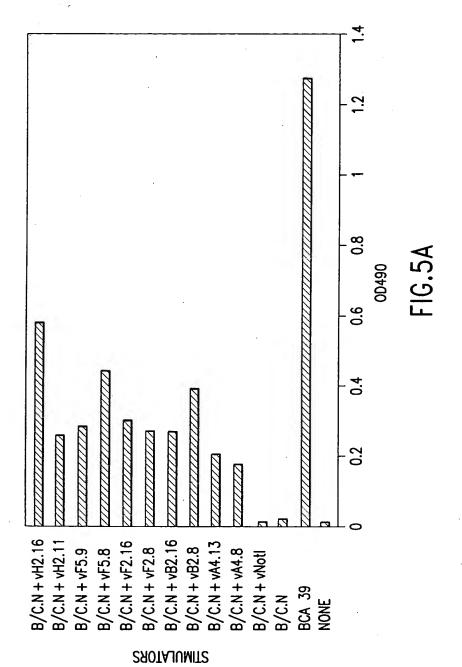
FIG.3













		PECIFIC LYSIS R : TARGET
TARGET	10:1	2:1
BCA 34	68.4	54.8
BCA 39	36.6	23.4
B/C.N	0.2	0.3
B/C.N + vF5.8	47.5	34.6
B/C.N + vH2.16	67.8	56.2
B/C.N + VACCINIA VECTOR	0	0.2

FIG.5B

		-	00	
	26	-	ATC	
	55 56	I	CAC	
	54	-	ACC	
	53	≥	ATG	
	52	ဗ	၁၅၅	
	45 46 47 48 49 50 51 52 53 54	FLGYKAGMTH	GCC TTT CTG GGT TAC AAG GCT GGC ATG ACC CAC ATC	
	20	×	AAG	Ø
	49	>	TAC	3.6
	48	g	GGT	FIG.6A
	47	_	CTG	
	46	ட	E	
	45	¥	၁၁	
31	Amino Acid Position	Sequence	Nucleotide	

•	-		
26			
55	I	1	
54	-	+	
53	Σ	!	
45 46 47 48 49 50 51 52 53 54 55	A G M		
51	⋖	!	
20		-	a
49	L G Y K		FIG.6B
48	ပ	Ì	Ξ
47		-	
46	Ŀ	l	
45	⋖	1	
Amino Acid Position	Sequence		



		PECIFIC LYSIS R : TARGET
TARGET	<u>10:1</u>	2:1
BCA 34	62.4	32.1
BCA 39	49.7	23.6
B/C.N	3.3	0.2
B/C.N + L3 PEPTIDE 48-56 (154)	46.0	16.1
B/C.N + L3 PEPTIDE 48-56 (T54)	2.0	0
B/C.N + L3 PEPTIDE 45-54 (154)	0	0

FIG.7A



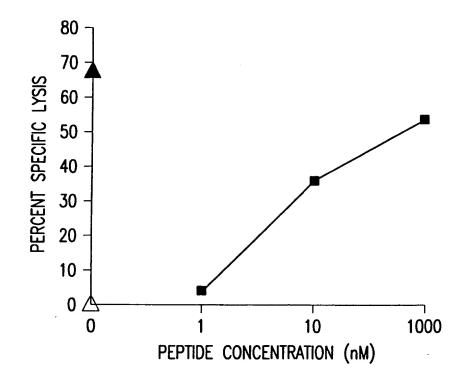


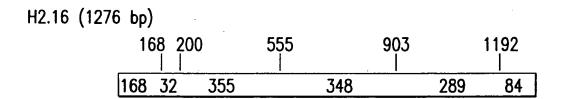
FIG.7B



PUBLISHED L3 (1276 bp)

2	200	555 	903	1192
200	355	348	289	9 84

168-171=GACC



168-171=GATC

FIG.8A



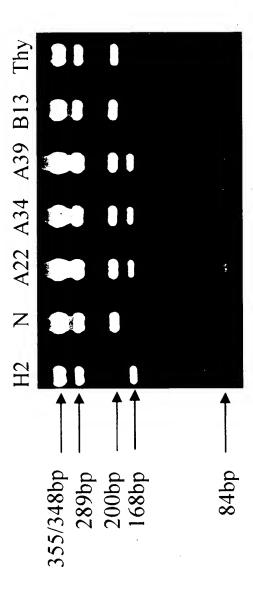
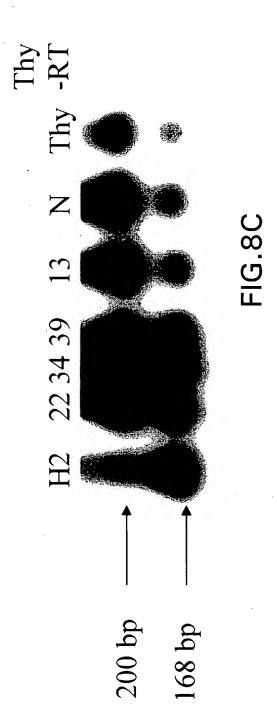


FIG.8B



Appl. No. 09/824,787; Filed: April 4, 2001 Dkt. No. 1821,0040001; Group Art Unit: 1642 Inventors: ZAUDERER et al.; Tel: 202/371-2600 Title: Gene Differentially Expressed in Breast and Bladder Cancer, and Encoded Polypeptides





PERCENT SPECIFIC LYSIS IMMUNOGEN

	¥	vH2.16	v7.5/tk	/tk
TARGET	40:1	10:1	40:1	10:1
BCA 34	33.6	12.9	5.7	4.0
BCA 39	22.1	9.0	5.3	3.1
B/C.N + L3 48-56 (154)	48.2	20.2	3.9	1.5
B/C.N + L3 48-56 (T54)	6.4	1.4	1.8	2.9
B/C.N	7.1	5.7	6.1	2.8
YAC	1.2	2.5	0	1.8





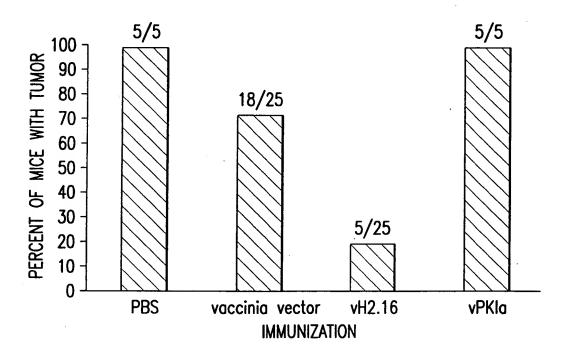


FIG.9B





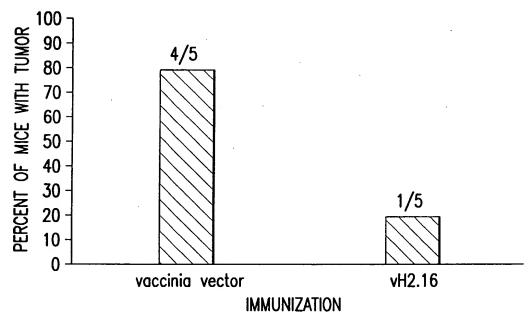


FIG.9C

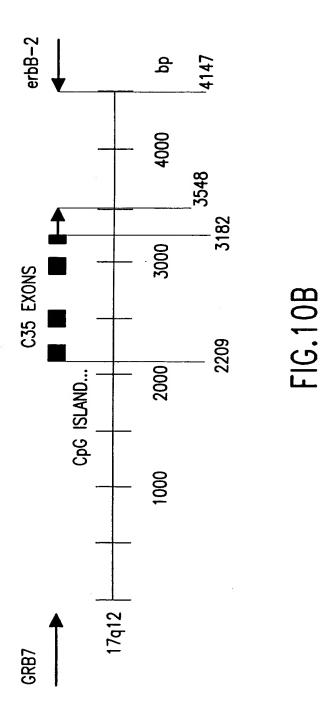


gcccgagcggagccgccqcq ATG AGC GGG GAG CCG GGG CAG ACG TCC GTA GCG CCC CCT CCC GAG GAG GTC GAG CCG GGC AGT GGG GTC CGC Р Р Ε Ε Ε P G ٧ ATC GTG GTG GAG TAC TGT GAA CCC TGC GGC TTC GAG GCG ACC TAC CTG GAG CTG GCC AGT GCT GTG AAG GAG CAG TAT CCG GGC ATC GAG S ٧ K E 0 Y ATC GAG TCG CGC CTC GGG GGC ACA GGT GCC TTT GAG ATA GAG ATA S G G T AAT GGA CAG CTG GTG TTC TCC AAG CTG GAG AAT GGG GGC TTT CCC Ν G F S K E G G F Ρ TAT GAG AAA GAT CTC ATT GAG GCC ATC CGA AGA GCC AGT AAT GGA Ī F Ī R R Α GAA ACC CTA GAA AAG ATC ACC AAC AGC CGT CCT CCC TGC GTC ATC Ε K S R P <u>CTG</u> TGA ctgcacaggactctgggttcctgctctgttctggggtccaaaccttggtct

FIG. 10A







Cancer, and Encoded Polypeptides



Breast epithelial cell lines

BT20 TUMOR MCF7 TUMOR SKBR3 TUMOR T47D TUMOR T47D TUMOR T47D TUMOR T47D TUMOR T47D TUMOR T47D TUMOR T10MOR

D-acmi

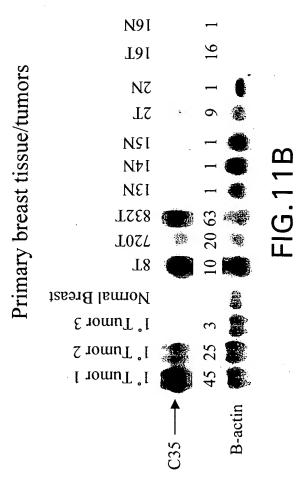
GAPDH

3 Week Thymus NORMAL Breast H16N2 TUMOR Metastatic 21MT1 TUMOR Primary 21NT2 TUMOR Primary 21PT

0.5 1

FIG.11A





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Appl. No. 09/824,787; Filed: April 4, 2001 Dkt. No. 1821.0040001; Group Art Unit: 1642 Inventors: ZAUDERER et al.; Tel: 202/371-2600 Title: Gene Differentially Expressed in Breast and Bladder Cancer, and Encoded Polypeptides

11 1N 2T 2N 2N 3N 4T 4N

C35 →



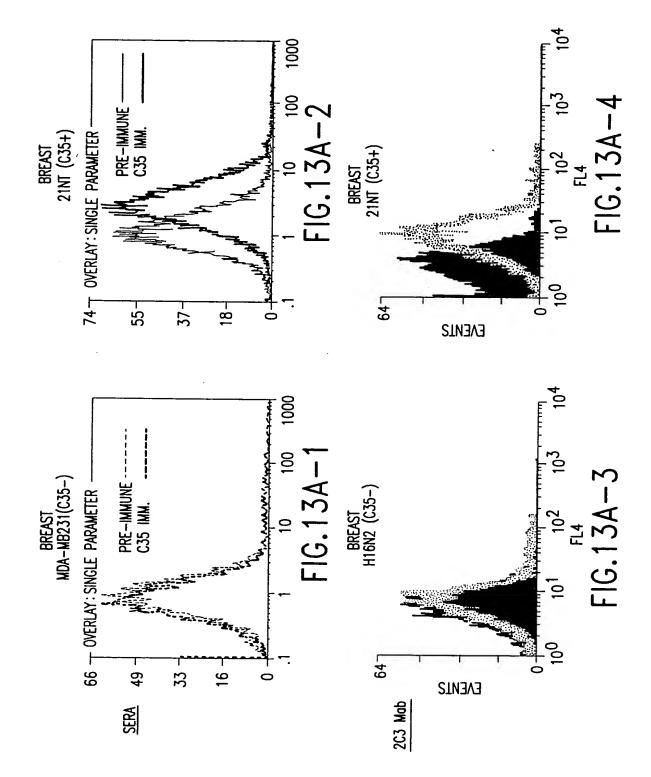
95 1 211 1

B-actin

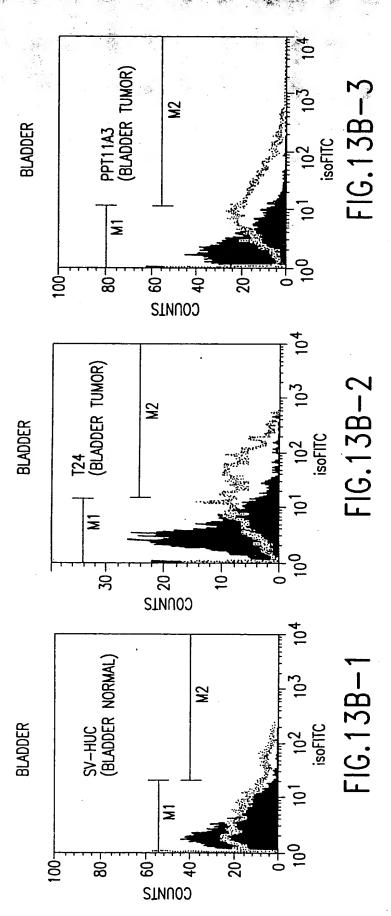


FIG.12











21NT BREAST TUMOR

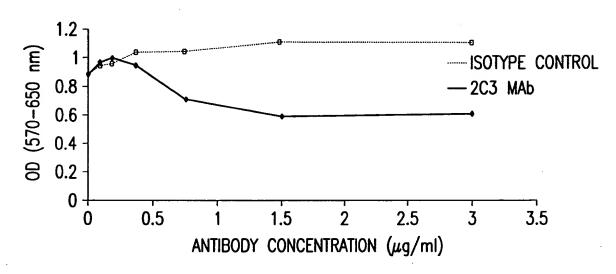


FIG.14A

HI6N2 NORMAL BREAST

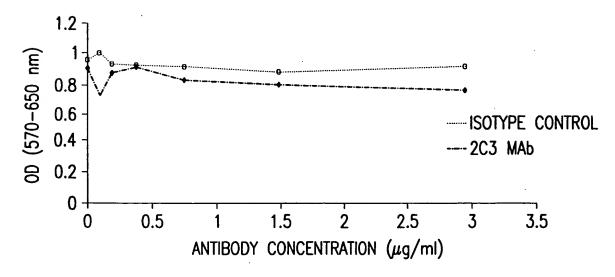


FIG.14B



Cancer, and Encoded Polypeptides

LYTIC ACTIVITY OF C35-SPECIFIC T CELL LINE 4

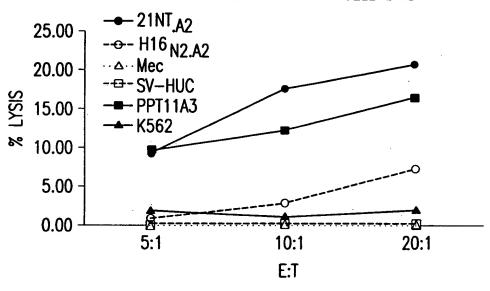


FIG.15A

LYTIC ACTIVITY OF C35-SPECIFIC T CELL CLONE 10G3

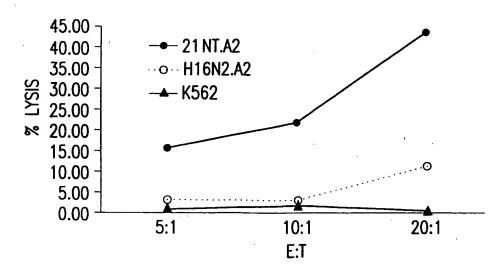


FIG.15B

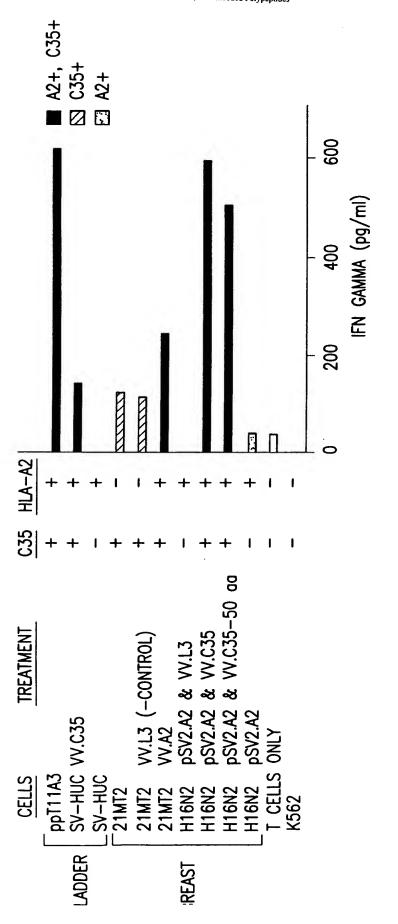


FIG.16A



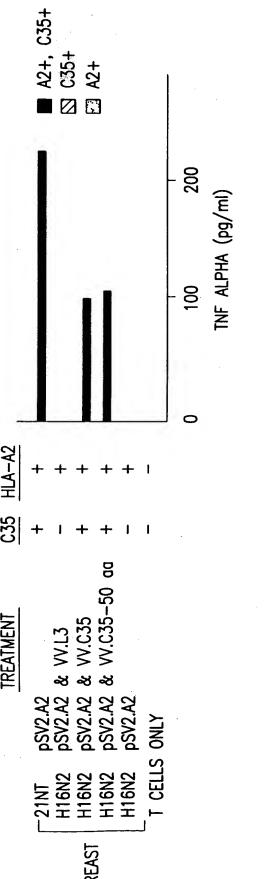


FIG. 16B



TOLERANCE TO ALLOANTIGENS INDUCED IN PRESENCE OF ANTIGENS AND ANTI-CD40 LIGAND ANTIBODY

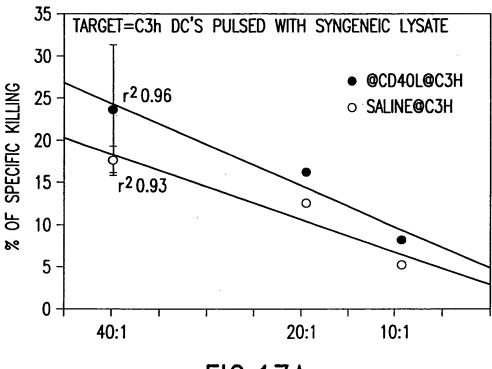


FIG.17A

